

REMARKS

In view of the above amendments and the remarks to follow, reconsideration and allowance of this application is respectfully requested.

Claims 1-5 are pending. Independent claims 1 and 5 have been amended.

Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Motoda (U.S. Patent 4, 588,341) in view of Araake (GB 2337325A), Hoflinger (U.S. Patent 5,103,087) and Fisher (U.S. Patent 4,701,096). Claims 2 and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Motoda in view of Araake, Hoflinger, Fisher and further in view of Schell (U.S. Patent 3,951,228). Claims 3 and 4 were rejected under 35 U.S.C. 103(a) as being unpatentable over Motoda in view of Araake, Hoflinger, Fisher and further in view of Selusnik (U.S. Patent 3,974,922).

Independent claims 1 and 5 have been amended to more clearly define those structural limitations necessary to the implementation of the present invention. Specifically, claims 1 and 5 have been amended to recite “an ionizer provided near said opening and disposed between the first tray stock and the second tray stock, said ionizer jetting ionized air to the products carried in through said opening by jetting ionized air from the ionizer in a horizontal direction and in a diagonally downward direction towards said opening, said horizontal direction being opposite to a direction of transport of the products and said jetting being from a side of said opening near said opening to the other side of said opening so as to remove contaminants and dust from the transported products.” Support for this recitation is set forth in the application as originally filed at least in Figures 1, 5 and 9.

It is submitted that the cited references, independently and in combination, do not disclose or suggest all the structural limitations recited in amended claims 1 and 5. Specifically, the cited references do not disclose or suggest (1) an ionizer disposed between a first and second tray stock and positioned near an opening in the first stock tray through which products are received, (2) as a result of the ionizer's positioning, the ionizer jetting ionized air in a horizontal direction and in a diagonally downward direction towards said opening, the horizontal direction being opposite to the direction of transport of the products from the first tray stock to the second tray stock and the jetting being from a side of the opening near the ionizer and to the other side of the opening, and (3) as a result of the jetting ionized air, the ionizer removes contaminants and dust from the transported products.

The Examiner acknowledges that Motoda is silent regarding an ionizer or air cleaning system. The Examiner states that Hoflinger teaches blowing air opposite to a product conveying direction in order to better remove dust. (page 3, lines 10 - 13) Specifically, the Examiner cites a disclosure in Hoflinger teaching the use of suitable guidance measures, such as guide plates or the like, so that a larger proportion of the pure air can be blown counter to the conveying direction. (column 1, line 68 - column 2, line 2) Applicant submits that Hoflinger, including the above referenced teaching, does not disclose or suggest the ionizer and its accompanying structural limitations as recited in amended claims 1 and 5.

Specifically, Hoflinger discloses a process and apparatus for detecting impurity particles in fluids with an apparatus including illuminating and detecting device for defining an optical path through which a fluid is conveyed along a fluid conveying path. (Abstract) To increase reliability of detection, pure air is blown from the optical path into a fluid conveying channel

thereby ensuring freedom from dust. (Abstract) As shown in the Figure, a fluid conveying channel 3 is located near an illuminating device 6 defining one end of an optical path 12 at one end of an apparatus 2. A blower 13 and a filter 14 are located on the opposite end of apparatus 2 behind a detecting device 11 defining the other end of optical path 12. In operation, blower 13 and filter 14 push clean air 12 from behind and away from detecting device 11 towards conveying channel 3 thereby pushing dust and other airborne impurities away from optical path 12 and out through the inlet and outlet passages of conveying channel 3. Therefore, while Hoflinger does disclose a conveying channel on one end of an apparatus and a blower on the opposite end of the apparatus, it does not disclose a blower itself disposed between the inlet and outlet passages of the conveyance channel and positioned near the opening of either of the passages defining the conveyance channel. Moreover, Hoflinger teaches away from such a configuration since repositioning the blower on the same end of the apparatus as the conveyance channel removes the optical path from the clean air path originating with the blower and terminating with the inlet and outlet passages of the conveyance channel. As such, removal of dust and airborne impurities from the optical path is precluded and thereby defeating the very purpose of the blower and filter of Hoflinger. Accordingly, Hoflinger does not disclose or suggest an ionizer disposed between a first and second tray stock and positioned near an opening in the first stock tray through which products are received as recited in amended claims 1 and 5.

Similarly, while Hoflinger does disclose a clean air flow exiting the blower in a horizontal direction and a diagonally downward direction towards the inlet and outlet openings of the conveyance channel, it does not disclose the horizontal direction of the air exiting the blower being opposite to the direction of the fluids through the conveyance channel. Rather, the

horizontal direction of air exiting the blower, irrespective of any guide plates further down the clean air path, is perpendicular to the direction of the fluids through the conveyance channel. Moreover, as discussed above, Hoflinger teaches away from repositioning the blower to satisfy structural limitation since doing so would remove the optical path from the clean air path thereby negating the very purpose of the blower. Accordingly Hoflinger does not disclose or suggest that as a result of the ionizer's position, the ionizer jetting ionized air in a horizontal direction and in a diagonally downward direction towards said opening, the horizontal direction being opposite to the direction of transport of the products from the first tray stock to the second tray stock and the jetting being from a side of the opening near the ionizer and to the other side of the opening as recited in amended claim 1 and 5.

Lastly, while Hoflinger does disclose removing dust and airborne containments from the optical path, it does not disclose or suggest a clean air system designed to removing dust and containments from the containers themselves as they are transported between the inlet and outlet passages of the conveyance channel. The Examiner states that this feature was not recited in applicant's claims. Applicant notes that claims 1 and 5 have been amended to affirmatively recite this limitation. Therefore, Hoflinger does not disclose or suggest that as a result of the jetting ionized air, the ionizer removing contaminants and dust from the transported products as recited in amended claims 1 and 5.

As previously discussed, Araaka and Fisher do not disclose or suggest the ionizer and its accompanying structural limitations as recited in amended claims 1 and 5. Since Motoda, Araaka, Hoflinger and Fisher fail to disclose or suggest all the limitations recited in claims 1 and 5, and because Schell (cited in rejection of claims 2 and 5) and Selusnik (cited in rejection of

claims 3 and 4) also fail to disclose those missing limitations, claims 1 and 5 are patently distinct and unobvious over the cited references. It is therefore requested that the rejection of claims 1 and 5, as well as claims 2-4, be withdrawn.


Moreover, notwithstanding the above arguments, applicant respectfully submits that the present invention is more than simply the combination of a first and second stock tray encompassed by an outer wall and a clean air system including an ionizer. In support of this, it is submitted that it would not have been obvious to one of ordinary skill in the art at the time of the invention was made to have tried modifying Motoda by the general teachings of Araake, Hoflinger and Fisher. Similarly, it is submitted that it would not have been obvious to modify the above references further by the teachings of either Schell or Selusnik.

Rebuttal evidence of secondary considerations submitted in a timely manner by the applicant must be considered in reevaluation obviousness. *Graham v. John Deere Co.*, 383 U.S. 1 (). Rebuttal evidence of secondary considerations may include commercial success, long felt but unsolved needs, failure of other and unexpected results. Applicant notes that the date of patent for the cited references are May 13, 1986 for Motoda, May 13, 1998 for Araake, April 7, 1992 for Hoflinger, October 20, 1997 for Fisher, April 20, 1976 for Schnell and August 17, 1976 for Selusnik. The filing date of the present application is March 22, 2005 which means that there is a gap of almost 19 years between the present application and the primary reference, Motoda, and a gap of almost 7 years between the present application and the latest issued secondary reference.

The purpose of the present invention is to provide for a stocker apparatus capable of loading products on trays with the products and trays kept clean in an environment containing much dust such as in a factory manufacturing resin based products. Moreover, it is a further purpose of the present invention to provide a stocker apparatus that is reduced in size and cost. Applicant respectfully submits that an increase in the variety and proliferation of resin based products demonstrates a long felt but unsolved need for a stocker apparatus such as the one disclosed in the present application. Moreover, the number of combined references needed to disclose this implementation of the invention and the large gap in time between the references and the filing date of the present application demonstrates the failure of others to such an implementation. Therefore, as a result of these secondary considerations which rebut a finding that it would have been obvious to combine these multiple references, it is submitted that the combination of structural elements recited in claims 1 and 5, is not obvious in view of the cited references.

In light of the foregoing, reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,

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